

(11) **EP 3 002 180 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 29.06.2016 Bulletin 2016/26

(51) Int Cl.: **B62D** 55/096 (2006.01) **B62D** 55/14 (2006.01)

B62D 55/32 (2006.01)

(43) Date of publication A2: **06.04.2016 Bulletin 2016/14**

(21) Application number: 15002764.7

(22) Date of filing: **24.09.2015**

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

BA ME

Designated Validation States:

MA

(30) Priority: **03.10.2014 US 201414505806**

(71) Applicant: Caterpillar Inc. Peoria, IL 61629 (US)

(72) Inventors:

• Steiner, Kevin L. Peoria, Illinois 61629-9510 (US)

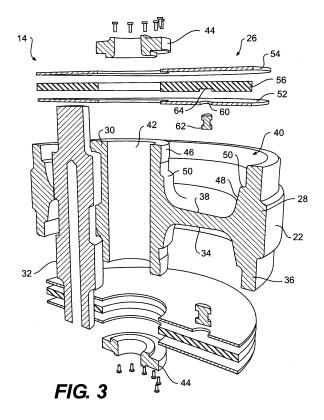
Knobloch, Daniel I.
 Peoria, Illinois 61629-9510 (US)

Eissler, Robert A.
 Peoria, Illinois 61629-9510 (US)

(74) Representative: Kramer Barske Schmidtchen Patentanwälte PartG mbB
European Patent Attorneys
Landsberger Strasse 300
80687 München (DE)

(54) SOUND SUPPRESSED IDLER WHEEL ASSEMBLY

(57) An idler wheel assembly (14) for a mobile machine (10) is disclosed. The idler wheel assembly may have an idler body (28) defining a cavity (40) between a hub portion (30) and a rim portion (36). The idler wheel assembly may also have a sound suppression device (26). The sound suppression device may have a first side plate (52) attached to the idler body and enclosing at least a portion of the cavity to form a closed space, and a second side plate (54) attached to the idler body. The sound suppression device may further have a dampening member (56) disposed between the first side plate and the second side plate, and dampening material (58) positioned inside the closed space and in contact with a surface of an inner portion (48) of the rim portion.





EUROPEAN SEARCH REPORT

Application Number EP 15 00 2764

5

5						
		DOCUMENTS CONSID				
	Category	Citation of document with in of relevant passa	dication, where appropriate,	Rele to cl	evant aim	CLASSIFICATION OF THE APPLICATION (IPC)
10	X	ET AL) 3 April 2014	KNOBLOCH DANIEL I [U (2014-04-03) - [0033]; figures 5	-	,5,6	INV. B62D55/096 B62D55/32 B62D55/14
15	Х	US 3 307 419 A (BRI 7 March 1967 (1967- * columns 2-3; figu	CKETT SHERMAN P ET # 03-07) re 1 *	AL) 1		
20	X	DE 297 21 852 U1 (G GMBH [DE]) 14 May 1 * pages 5-6; figure		HNIK 1		
	Х	US 1 726 385 A (DAN 27 August 1929 (192 * figures 1-3 *		1		
25					_	
30					-	TECHNICAL FIELDS SEARCHED (IPC)
35						
40						
45						
1	The present search report has been drawn up for all claims					
	Place of search		Date of completion of the search		C	Examiner
	The Hague		13 May 2016		Szaip, Andrá	
PPO FORM 1503 03.82 (P04C01)	CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with anothed document of the same category A: technological background O: non-written disclosure		E : earlier pat after the fil D : document L : document	ry or principle underlying the invention er patent document, but published on, or the filing date unent cited in the application ment cited for other reasons ber of the same patent family, corresponding		
EPOI	P : intermediate document		document			

EP 3 002 180 A3

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 15 00 2764

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

13-05-2016

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
15	US 2014091615 A1	03-04-2014	AU 2013327485 A1 CN 204641924 U EP 2903883 A1 US 2014091615 A1 WO 2014055528 A1	30-04-2015 16-09-2015 12-08-2015 03-04-2014 10-04-2014
	US 3307419 A	07-03-1967	NONE	
20	DE 29721852 U1	14-05-1998	AT 220998 T CA 2283170 A1 DE 19708553 A1 DE 29721852 U1 DK 0964795 T3	15-08-2002 11-09-1998 17-09-1998 14-05-1998 18-11-2002
25			EP 0964795 A1 ES 2181189 T3 PT 964795 E US 6312033 B1 WO 9839167 A1	22-12-1999 16-02-2003 31-12-2002 06-11-2001 11-09-1998
30	US 1726385 A	27-08-1929	NONE	
35				
40				
45				
50				
55	OHM POASS			

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82